

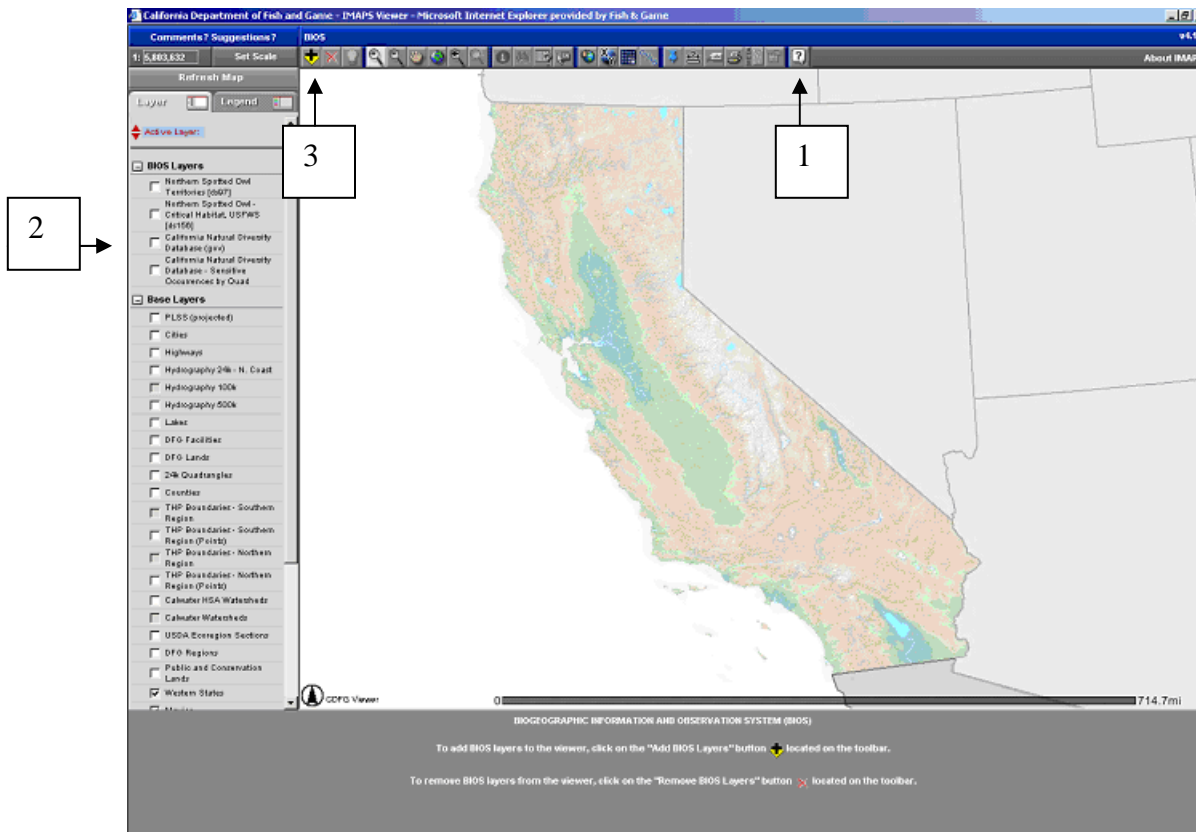
## Using the CNDDDB layer in the BIOS “CNDDDB / Spotted Owl Viewer” (May, 2006)

The CNDDDB / Spotted Owl Viewer is another option for accessing the CNDDDB information available in RareFind. With the viewer you can view data spatially, create labels, and print maps without the need to have GIS software installed on your computer. More complex spatial analysis and data manipulation will still require the use of a full GIS in conjunction with RareFind.

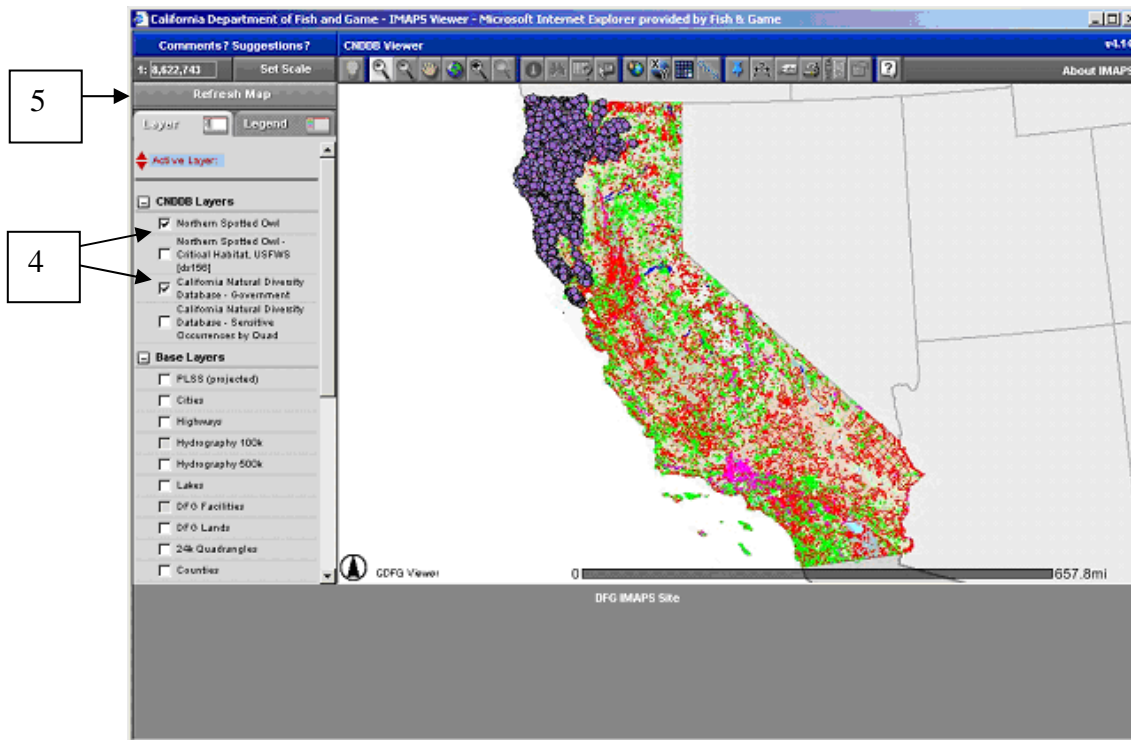
The viewer also allows the user to use the spotted owl data layer and other available BIOS layers in conjunction with the CNDDDB data layer.

More information about the tools on the tool bar is available with the “Help” tool (1).

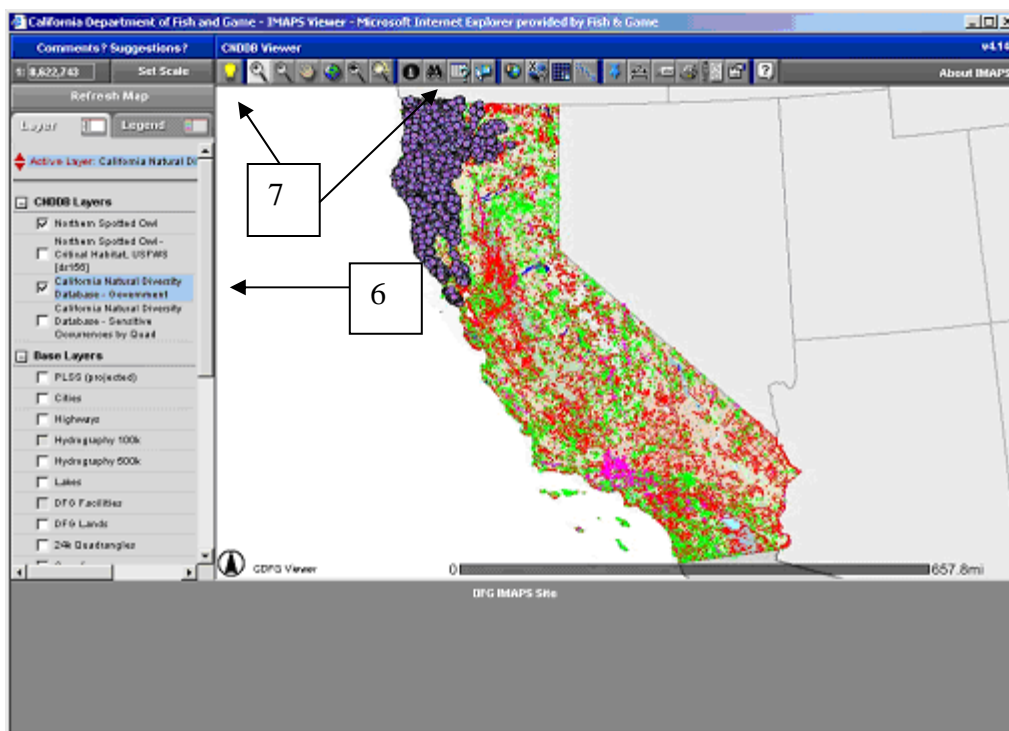
The CNDDDB / Spotted owl viewer comes with these layers already added (2). The “Add BIOS layers” button (3) can be used to add other BIOS data layers, such as designated critical habitats, vegetation and other animal information.



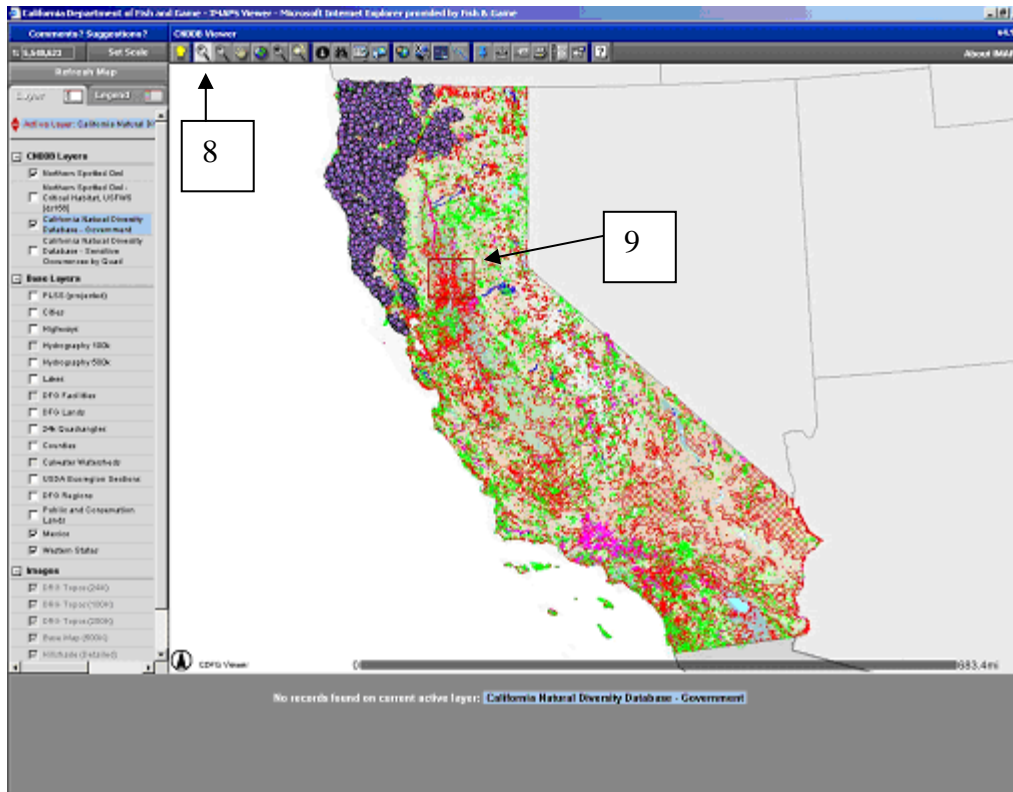
**Displaying layers:** Click the checkbox of each layer that you want displayed (4), then click on “Refresh Map” (5) to draw.



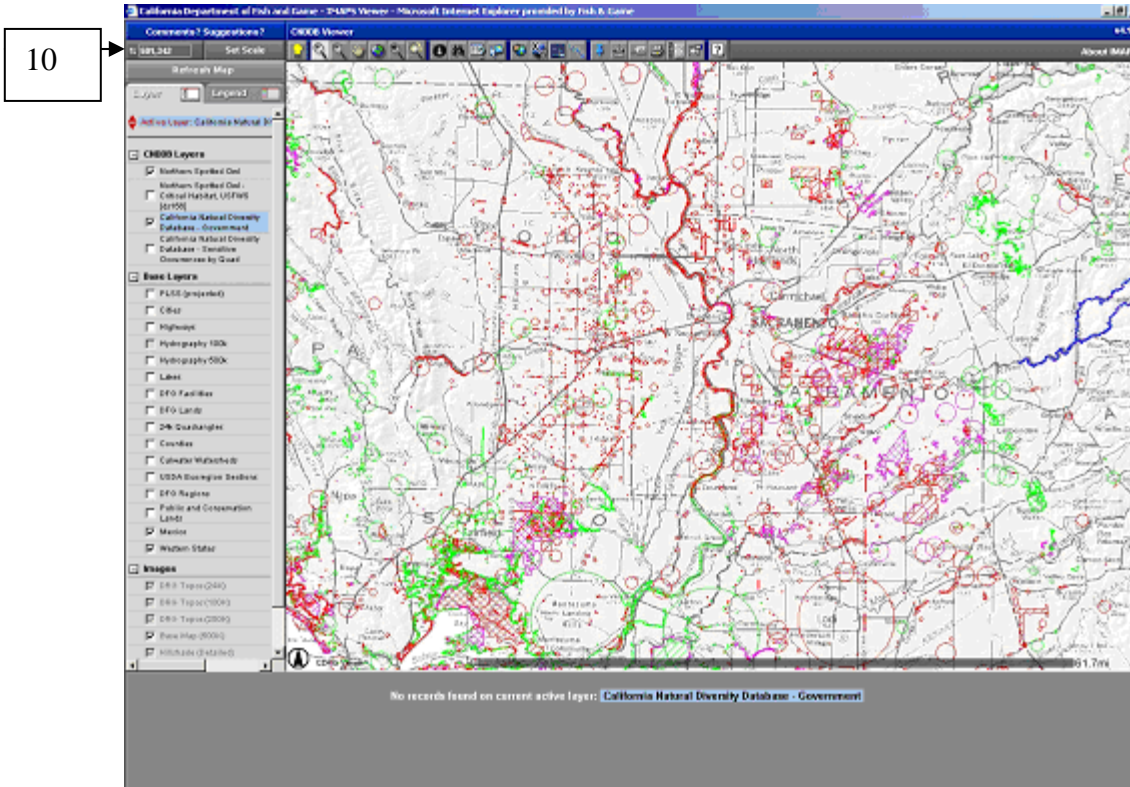
**Making a layer active:** Click on the name of a layer to make it the “Active Layer” (6). The active layer will become highlighted in blue. Only one layer at a time can be active. Once you’ve selected an Active Layer, additional tools on the tool bar may become available (7).



**Zooming:** Click the zoom-in tool (8), then draw a box around your area of interest (hold down the left mouse button to anchor one corner of the box, move the mouse diagonally to enlarge the box, and release the mouse button to complete the box) (9).

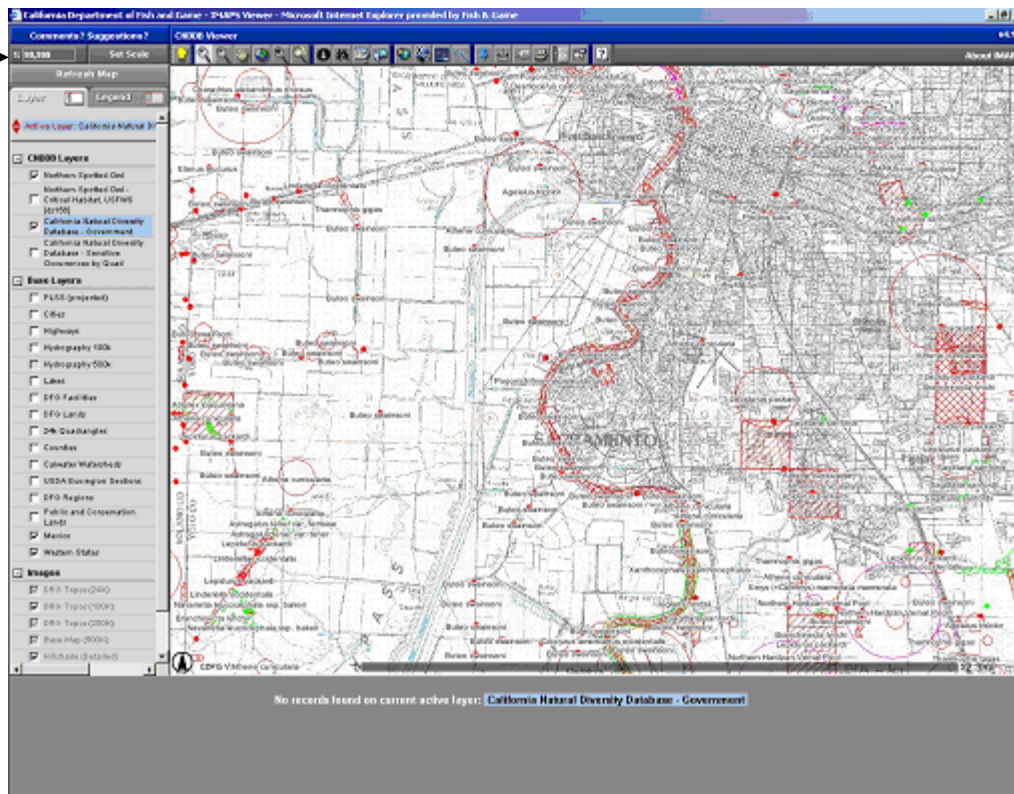


The map will redraw to the area of the box. As you zoom in more topographic features become visible. The current map scale is shown in the upper left hand corner (10).

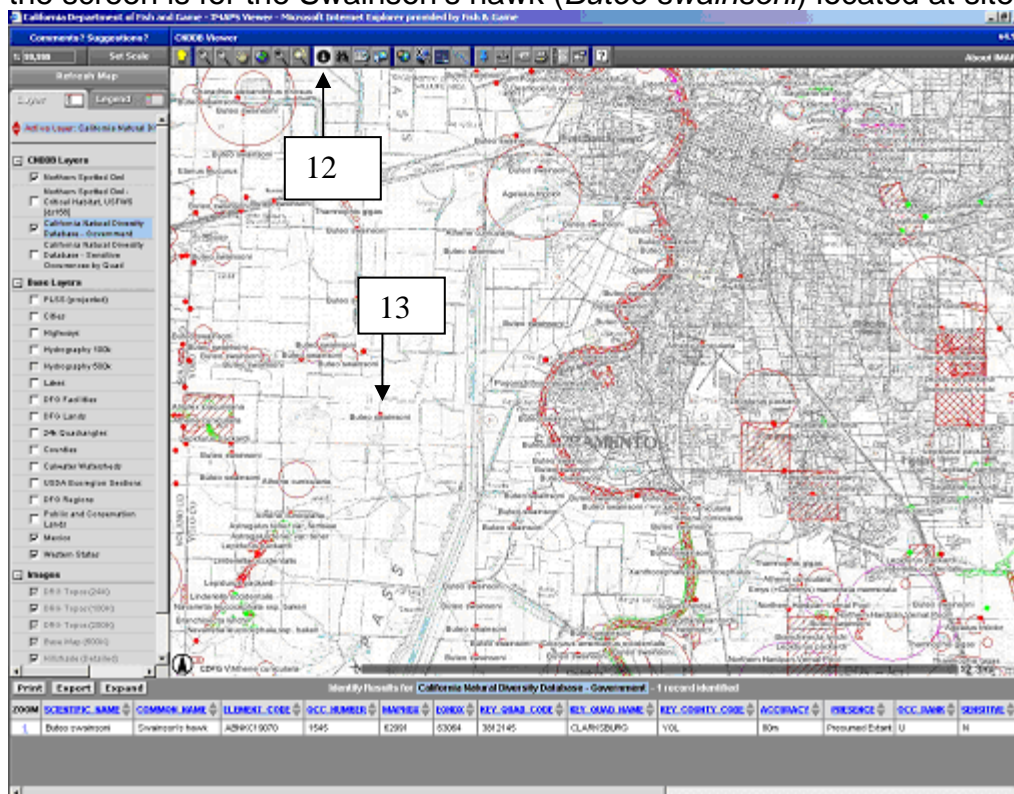




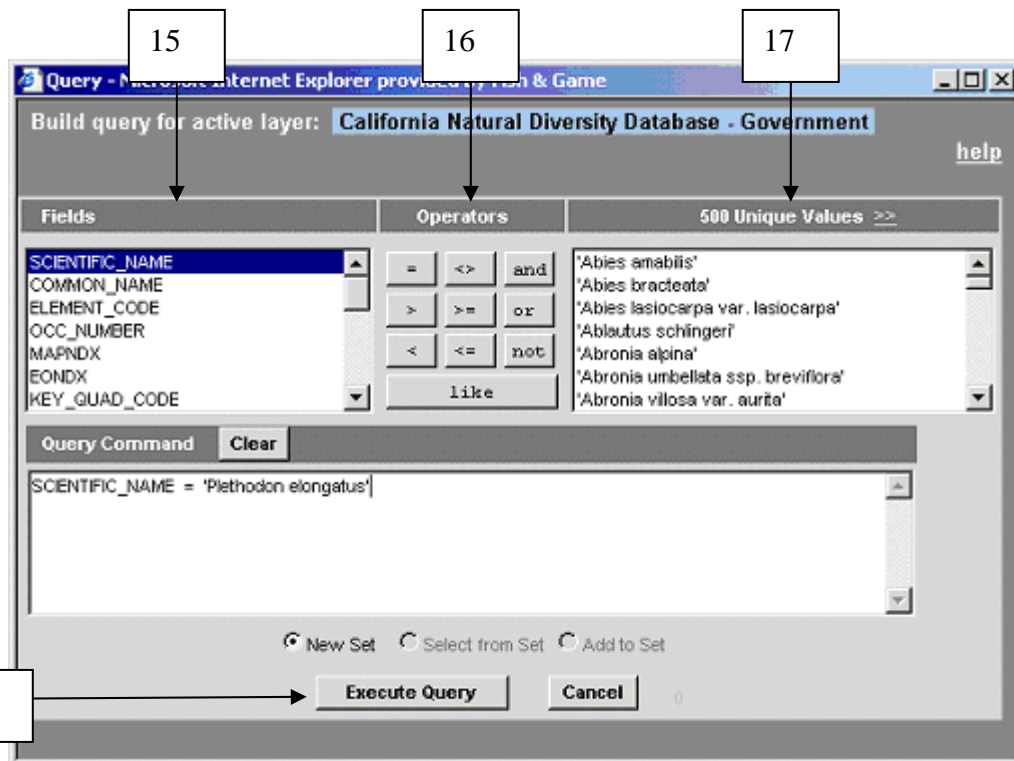
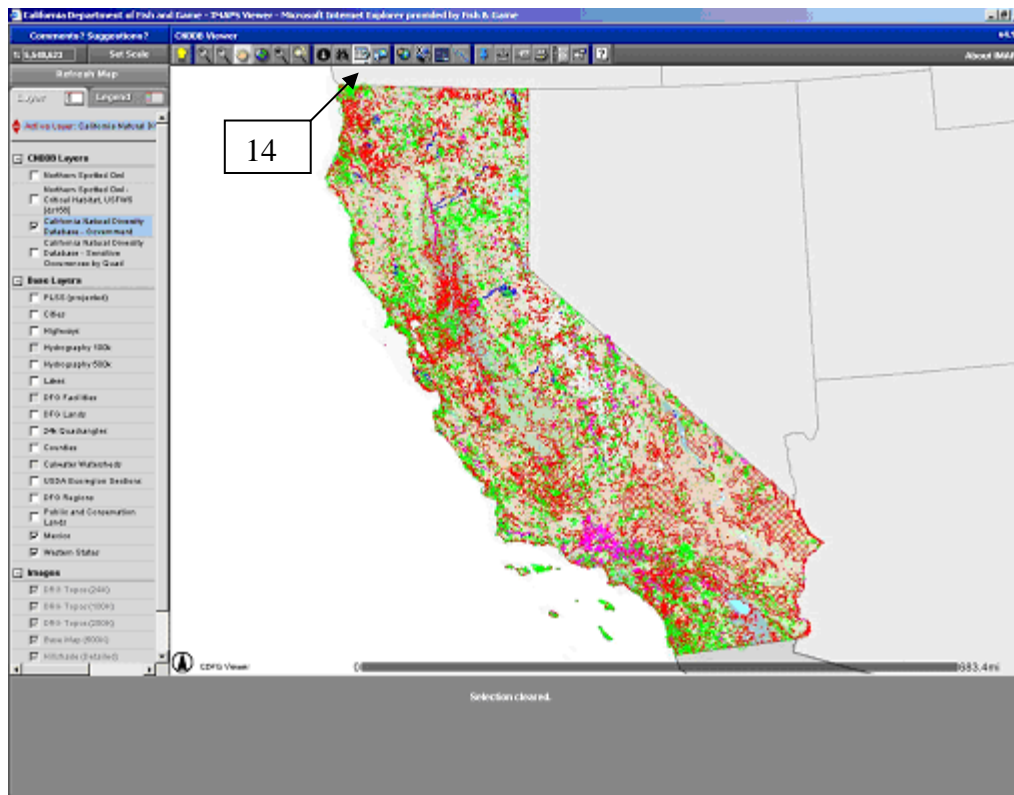
**Setting the scale:** You can set the scale by typing it in and then clicking “Set Scale” (11). When the scale is below 1:100,000 the scientific name of the element mapped is shown. The scale here is 1:99,999; the smallest scale at which the scientific name is visible.



**Identifying things in the active layer:** Use the “Identify” tool (12) to get additional information about a single occurrence by activating (clicking) the tool and then clicking the feature of interest (layer must be Active Layer). In this case, the information at the bottom of the screen is for the Swainson’s hawk (*Buteo swainsoni*) located at site 13.



**Selecting features by attribute:** You can also select features based upon attributes using the “Query” tool (14). When you click this tool the following window opens (below):



Double click on one of the options in “Fields” (15). Choose (single click) an operator (16), and scroll to, and double click or type in, a value (17). Note: typed values must exactly match the listed values. In this case I selected *Plethodon elongatus*. Finally, click the “Execute Query” button (18).

**Selected Features:** All of the selected features are highlighted in yellow. Note: the viewer will not automatically zoom to the area of the features selected. A limited amount of text data on each occurrence is displayed at the bottom of the screen. For easier viewing of the text data, the “Expand” button (19) will open a new, larger window with all of the text information shown at the bottom of the screen.

California Department of Fish and Game - CHDS Viewer - Microsoft Internet Explorer provided by Fish & Game

Comments? Suggestions? CHDS Viewer

Refresh Map

CHDS Layers

- ☐ Northern Sporadic Owl
- ☐ Northern Sporadic Owl - Critical Habitat, USFWS (2010)
- ☒ California Natural Diversity Database - Government
- ☐ California Natural Diversity Database - Transient Occurrences by Grid

Base Layers

- ☐ PLSS (grayscale)
- ☐ C842
- ☐ Highway
- ☐ Hydrography 100k
- ☐ Hydrography 500k
- ☐ Label
- ☐ SFO Facilities
- ☐ SFO Lands
- ☐ 24k Coastlines
- ☐ Counties
- ☐ Calwater Watersheds
- ☐ USDA Bureaus - Benthic
- ☐ SFO Regions
- ☐ Public and Conservation Lands
- ☐ Marine
- ☐ Wetland Status

Images

- ☐ SFO Topics (24k)
- ☐ SFO Topics (100k)
- ☐ SFO Topics (500k)
- ☐ Base Map (200k)
- ☐ Airphoto (24k/50k)

CHDS Viewer

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Query Results for California Natural Diversity Databases - Government 01 records selected

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
SCIENTIFIC NAME	COMMON NAME	ELEMENT CODE	CCC NUMBER	MAINT	USDC	KEY DATE CODE	KEY QUALIFIER	REV. COUNTY CODE	ACCURACY	PRESERVE	CCC NAME	SHRUBS					
1	Reithrodon elongatus	Del Norte suborder	AAAA12050	69	24506	13085	4112365	BEAR PEAK	95	1 m	Presumed Extant	U	N				
2	Reithrodon elongatus	Del Norte suborder	AAAA12050	53	24506	7120	4112315	TISH TASH POINT	HLM	1 m	Presumed Extant	U	N				
3	Reithrodon elongatus	Del Norte suborder	AAAA12050	74	24818	8608	4112386	BROCKENBUSH MTS	ONT	1 m	Presumed Extant	U	N				
4	Reithrodon elongatus	Del Norte suborder	AAAA12050	68	24752	21230	4072386	VILLOVY CREEK	HLM	1 m	Presumed Extant	U	N				

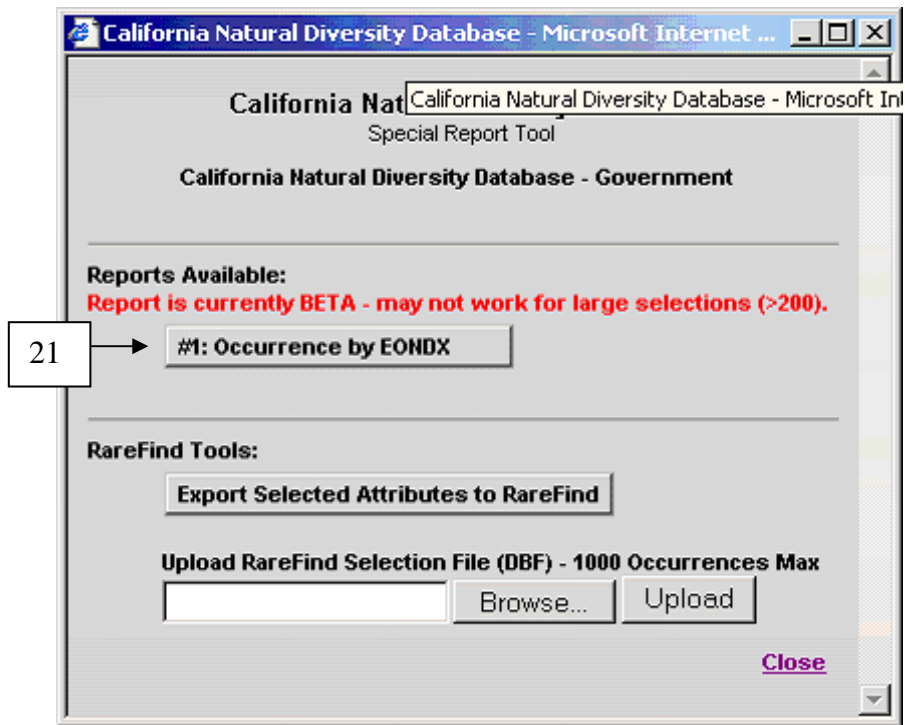


**Selecting features graphically:** If you want information on a group of occurrences, you can use the “Graphically select features from the active layer” tool (20) to draw a box around the occurrences, (same technique as drawing a box with the zoom tool). Any occurrence that the box touches will be included; the box does not have to completely enclose the occurrence.

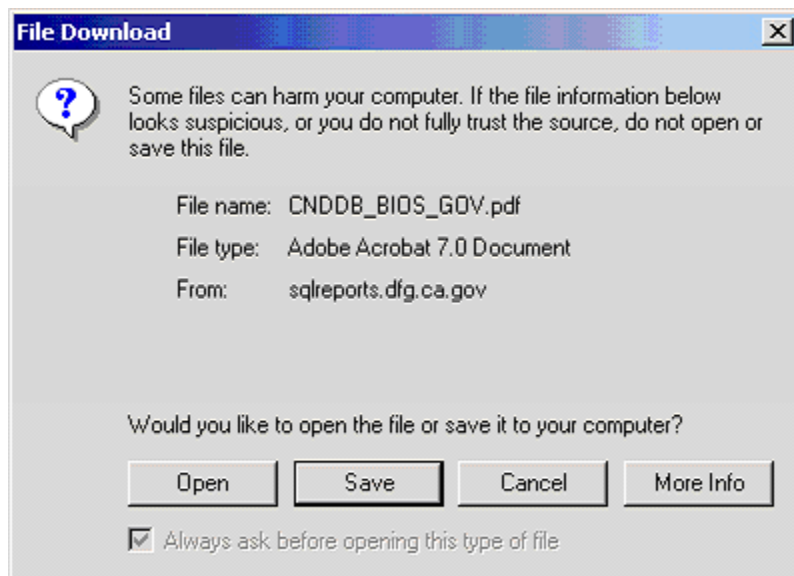
Selected Set Results for: California Natural Diversity Database - Government 23 records selected

ZOOM	SPECIES NAME	CORREL NAME	ELEMENT CODE	OCC NUMBER	MAPX	MAPY	KEY QUAL CODE	KEY SRS NAME	KEY COUNTY CODE	ACCURACY	PRESERVE	OCC
1	Lindernia occidentalis	California Invertebrate	ICPLA00018	212	48436	45436	3B12148	SAXOM	YOL	specific area	Presumed Extinct	B
2	Atherine oculostriata	harlequin owl	AMR0013018	409	48143	45143	3B12148	SAXOM	YOL	variegated area	Presumed Extinct	C
3	Ambystoma laterale var. brevis	Peninsular salamander	PERJAC00018	8	22755	19903	3B12148	SAXOM	YOL	1/8 mi	Possibly Extinct	X
4	Ambystoma laterale var. brevis	Peninsular salamander	PERJAC00018	31	24161	7754	3B12148	SAXOM	YOL	1/8 mi	Possibly Extinct	X

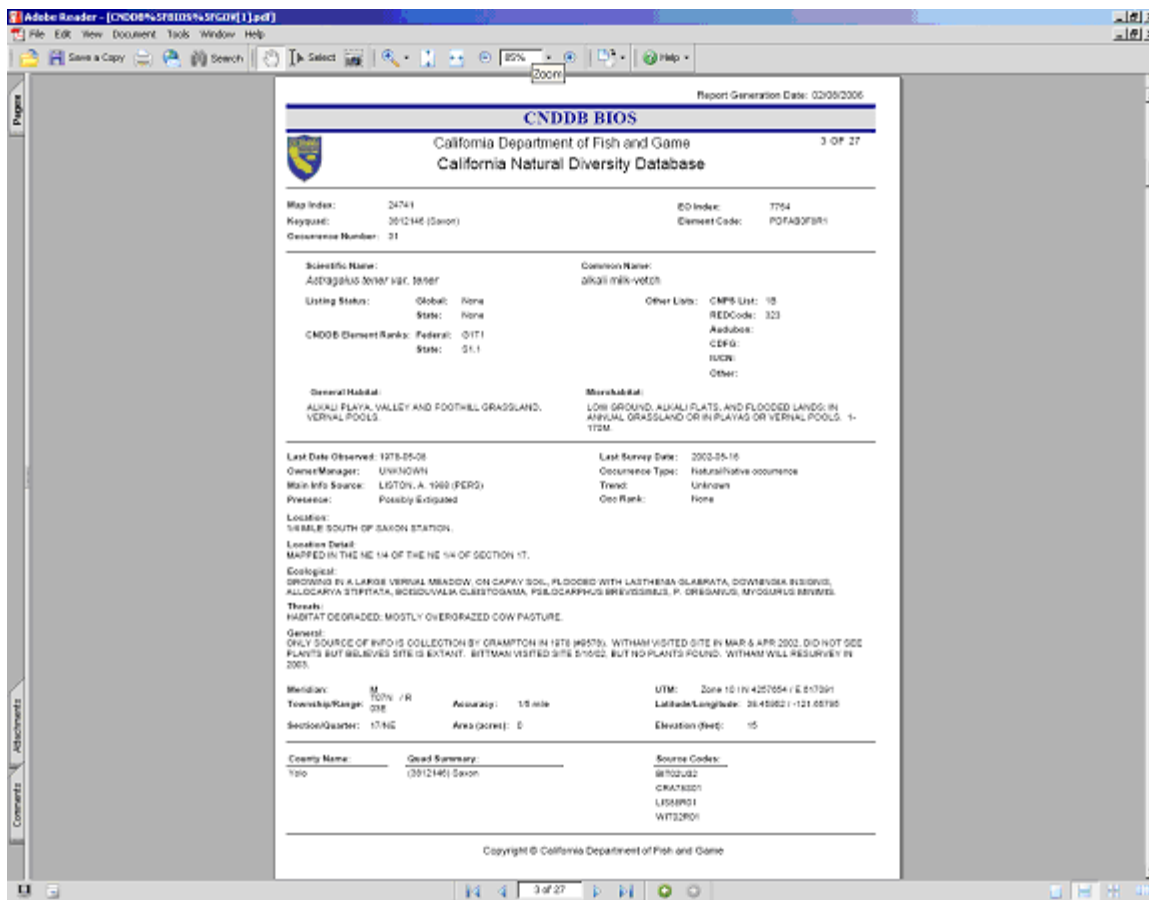
**Reports:** At this point, when you click on the “Increased functionality” tool (light bulb), the below window opens. From here you can choose to create reports from BIOS, or you can export this data set to RareFind. If you click on “#1: Occurrence by EONDX” (21), the following window will open.



You'll then get this File Download window. If you click “Open”, the PDF report is opened (see below). You can also save the reports to a file on your computer.

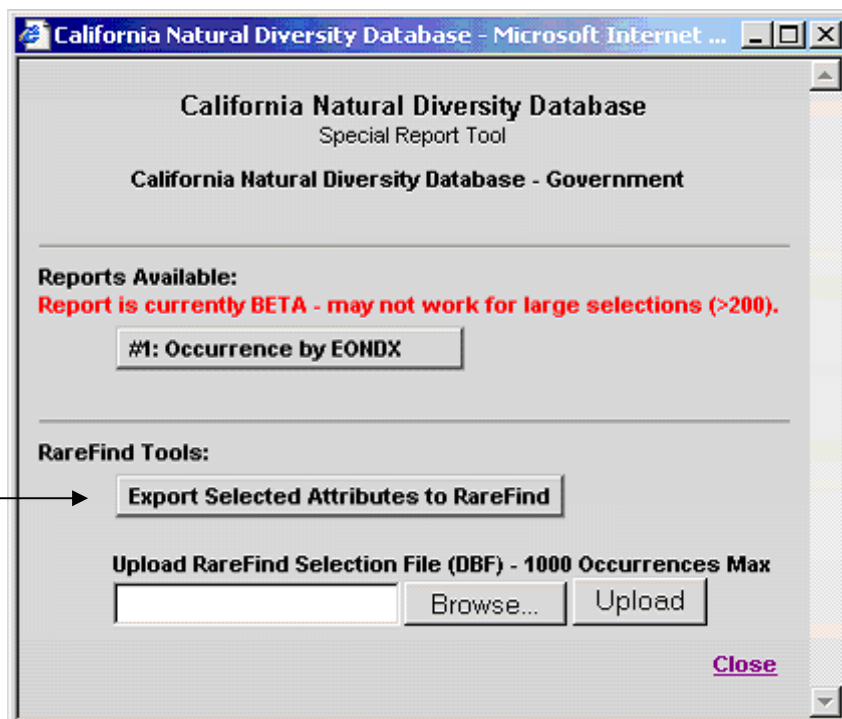






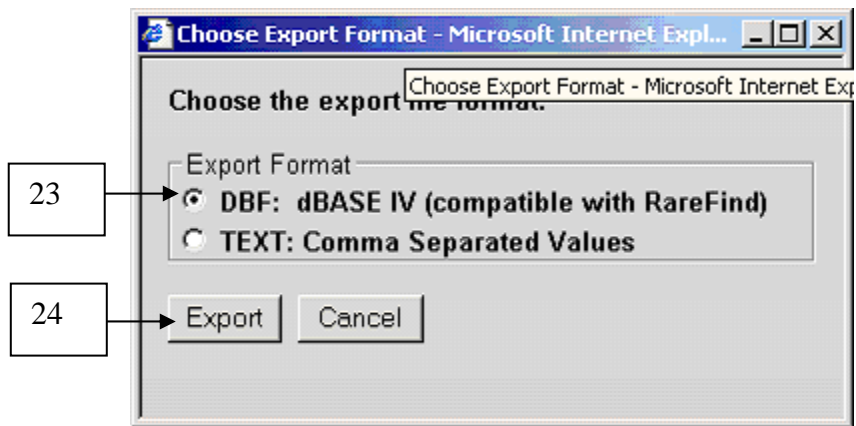
This report option is still under development. We will be making improvements to it, and eventually adding other report formats.

**Export BIOS Selection to RareFind:** Another report option is to export your selected occurrences to RareFind (22) and use RareFind as the report writer since RareFind has more report options.

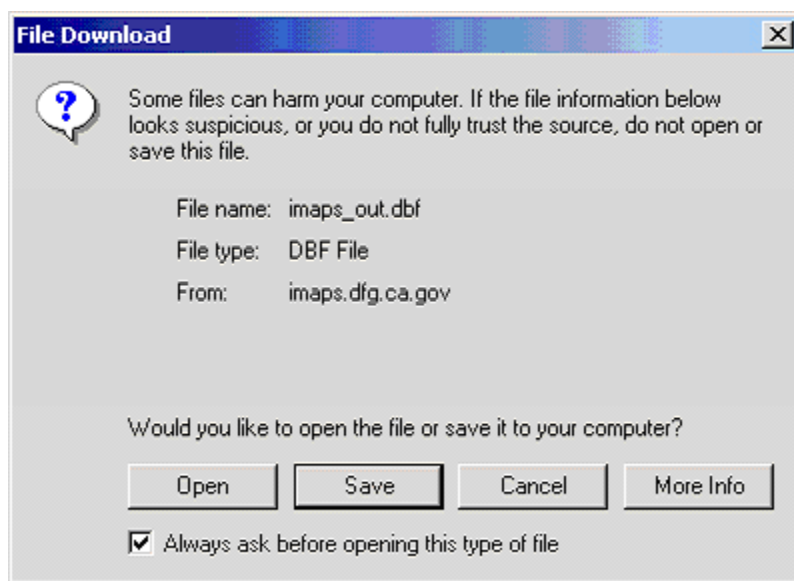


22

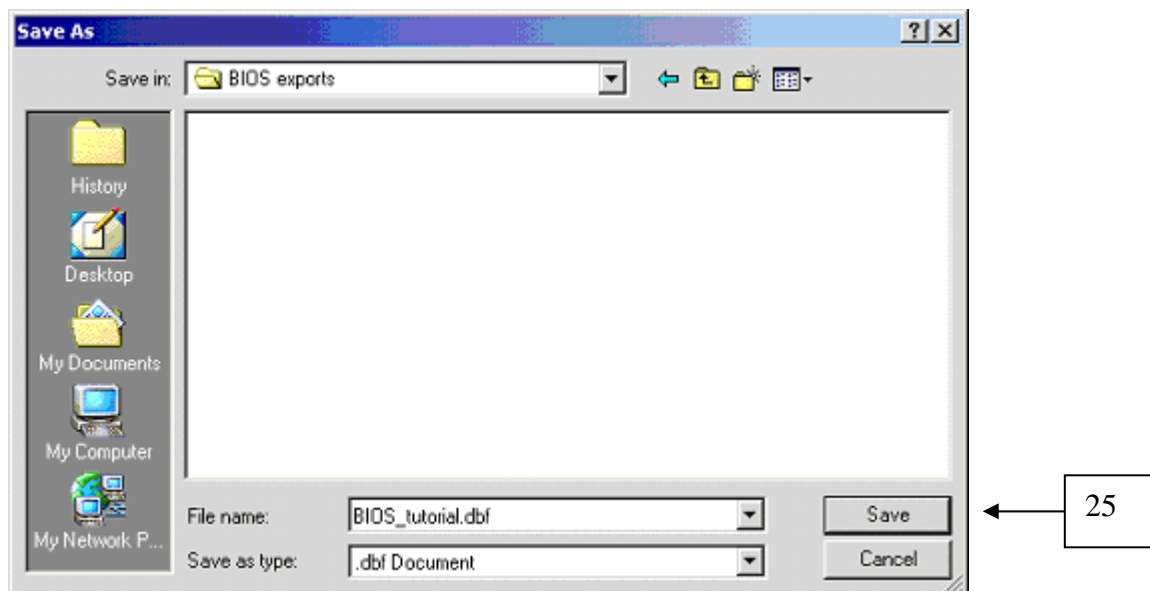
The default export option of DBF (23) is the correct one; click “Export” (24).



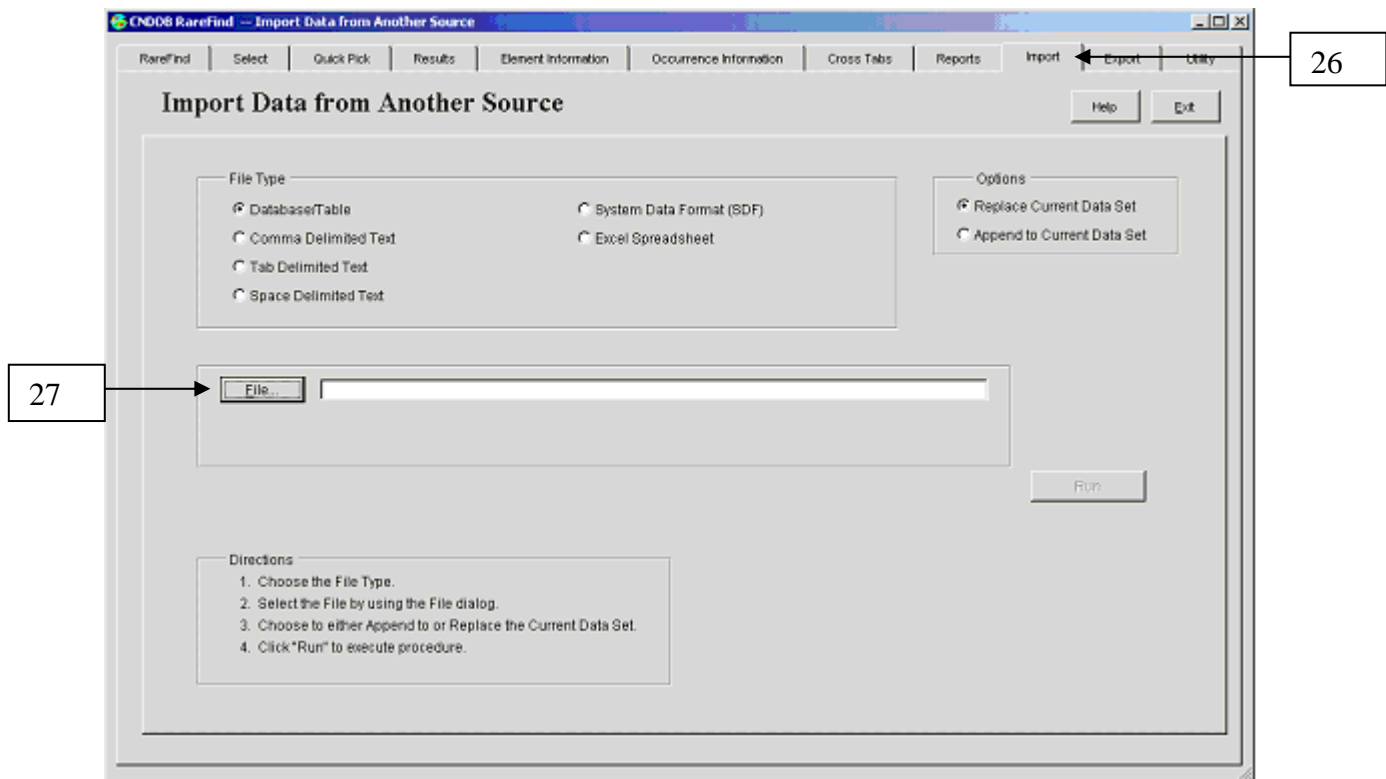
Next click “Save”. If you click “Open” it will open the .DBF file in an Excel spreadsheet.



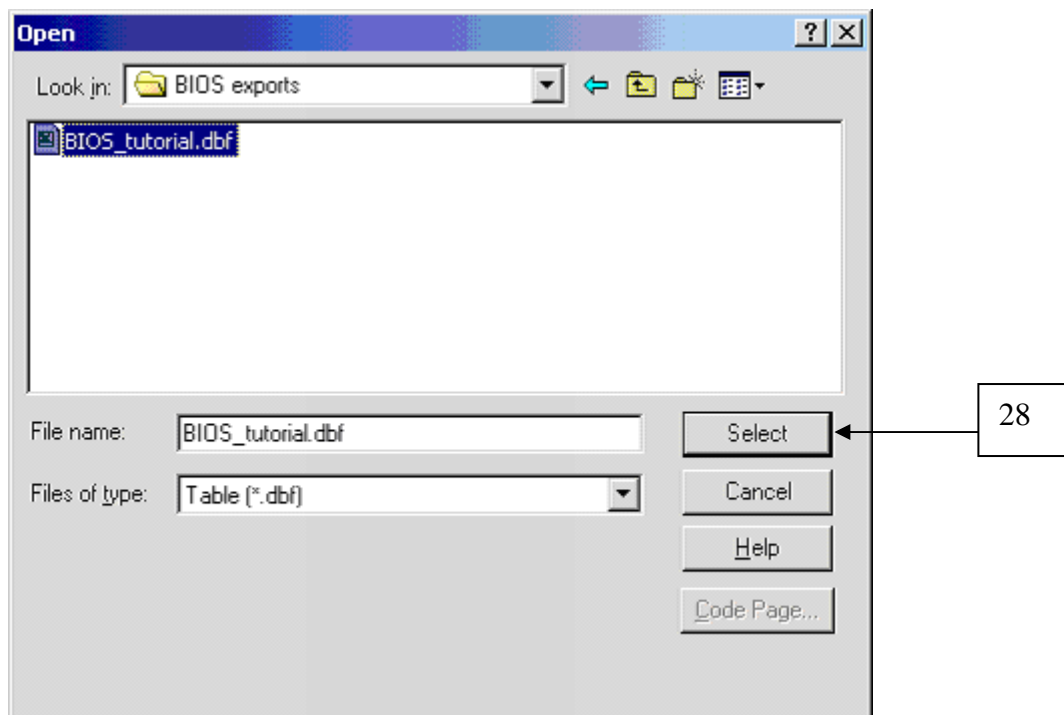
I have created a new folder on my “C” drive just for BIOS exports. Name your selection and click “Save” (25)



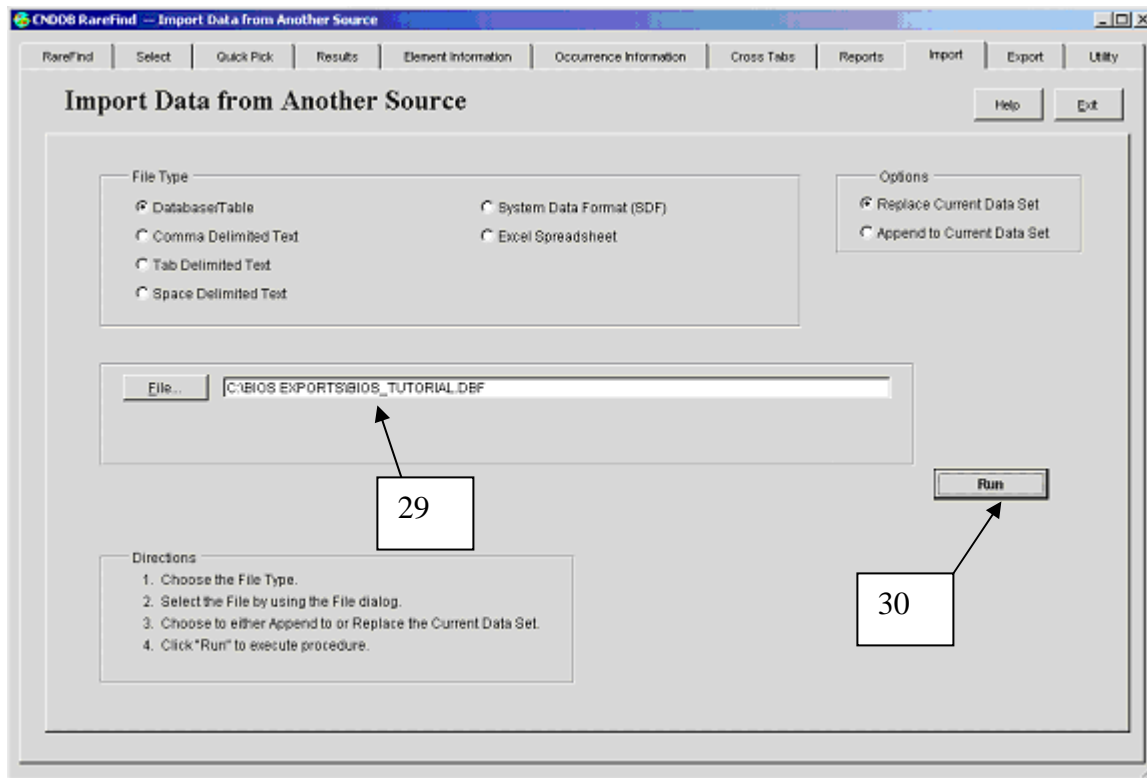
Next, open the RareFind program. Click the “Import” tab (26). Click the “File...” button (27).



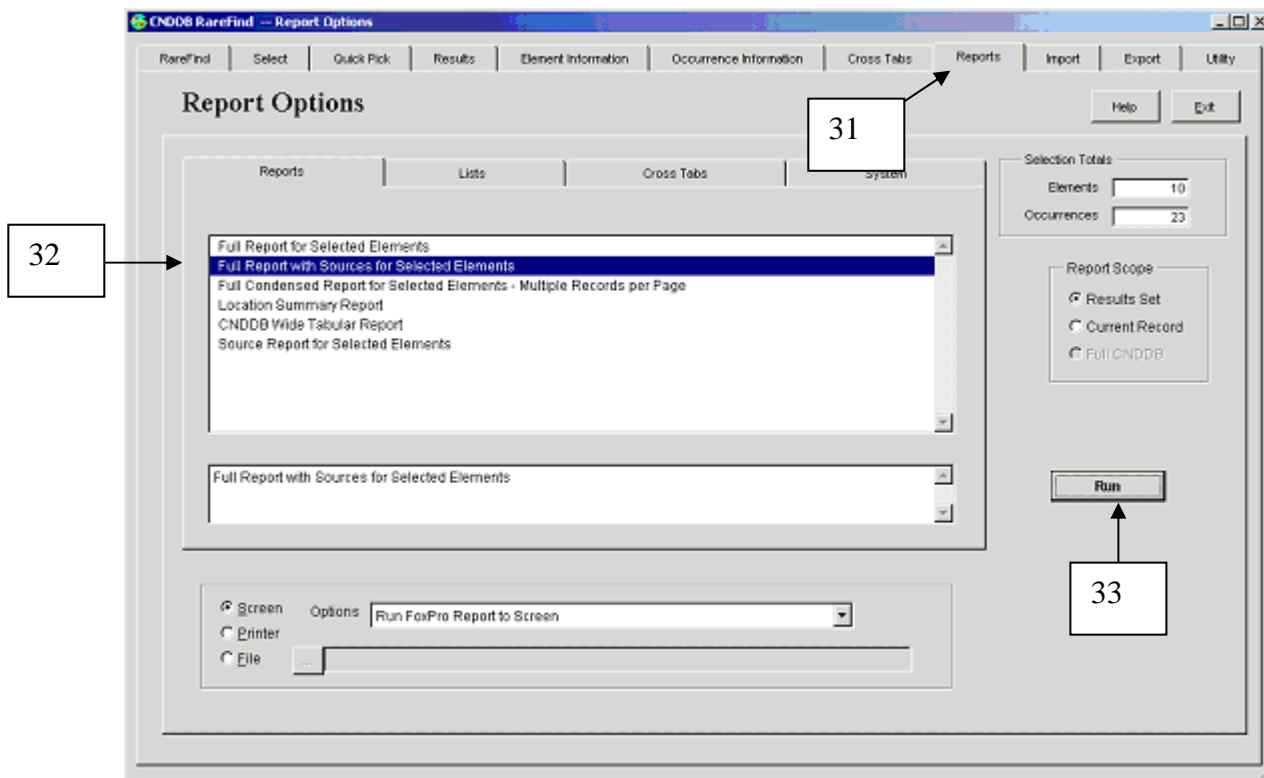
Navigate to the folder for BIOS exports. Select the file you want and click “Select” (28).



Be sure the correct file is shown in the “File...” window (29). Click “Run” (30). You will get a message when the selection procedure is completed. From this point, the usual RareFind report options are available.

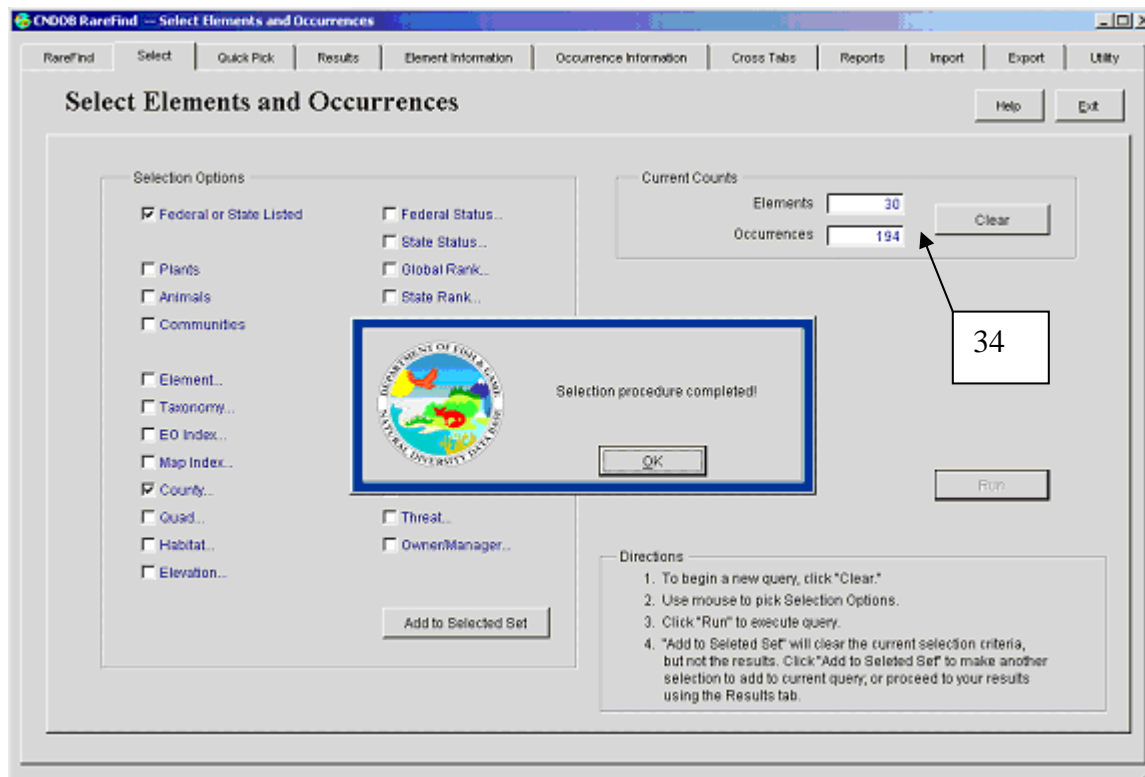


Click on the “Reports” tab (31), click on a report option (32), then click “Run” (33).



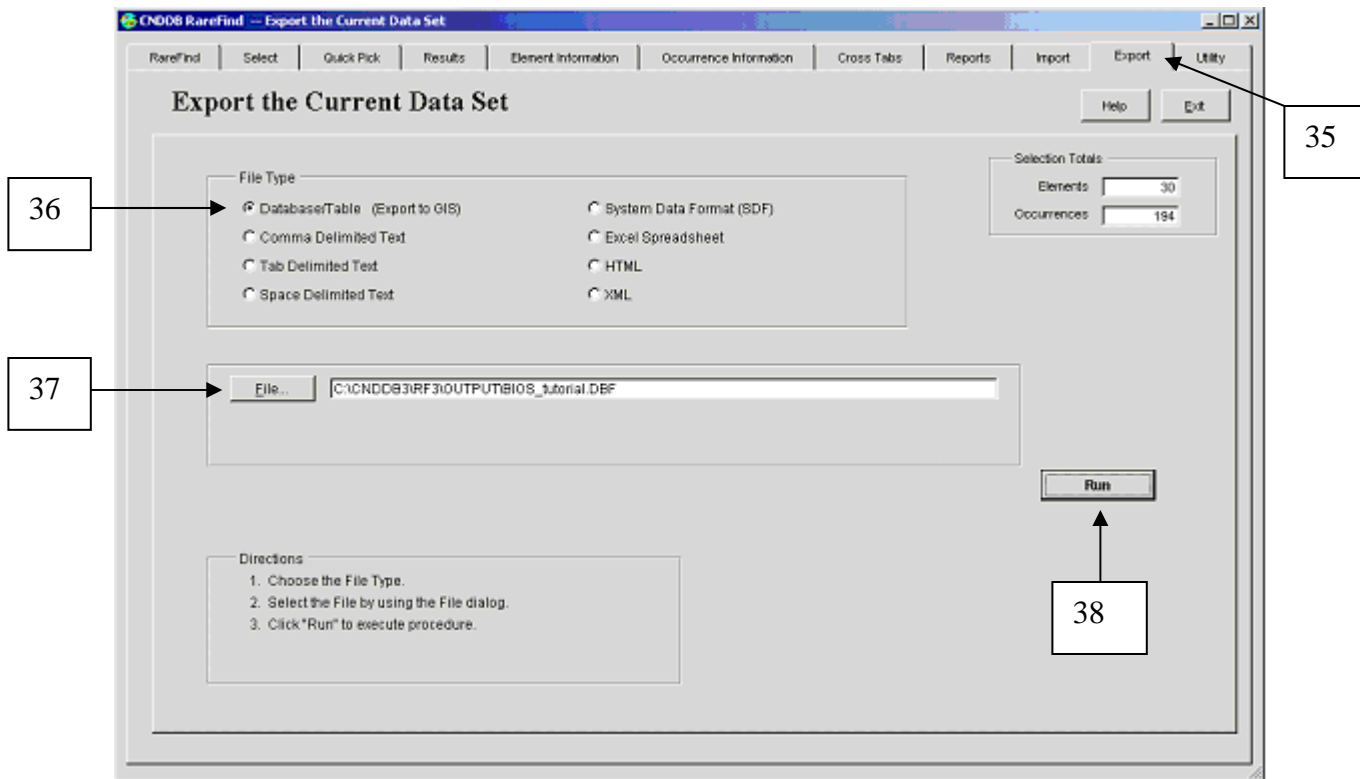


**Export RareFind Selection to BIOS:** So far we have shown how to make selections using the CNDDDB application in the BIOS viewer and then export the result to RareFind. You can also make a selection in RareFind (RareFind has more extensive selection tools than BIOS, specific to the CNDDDB) and export the result to the BIOS viewer to view on a map. The map can then be printed, emailed or saved to a file.

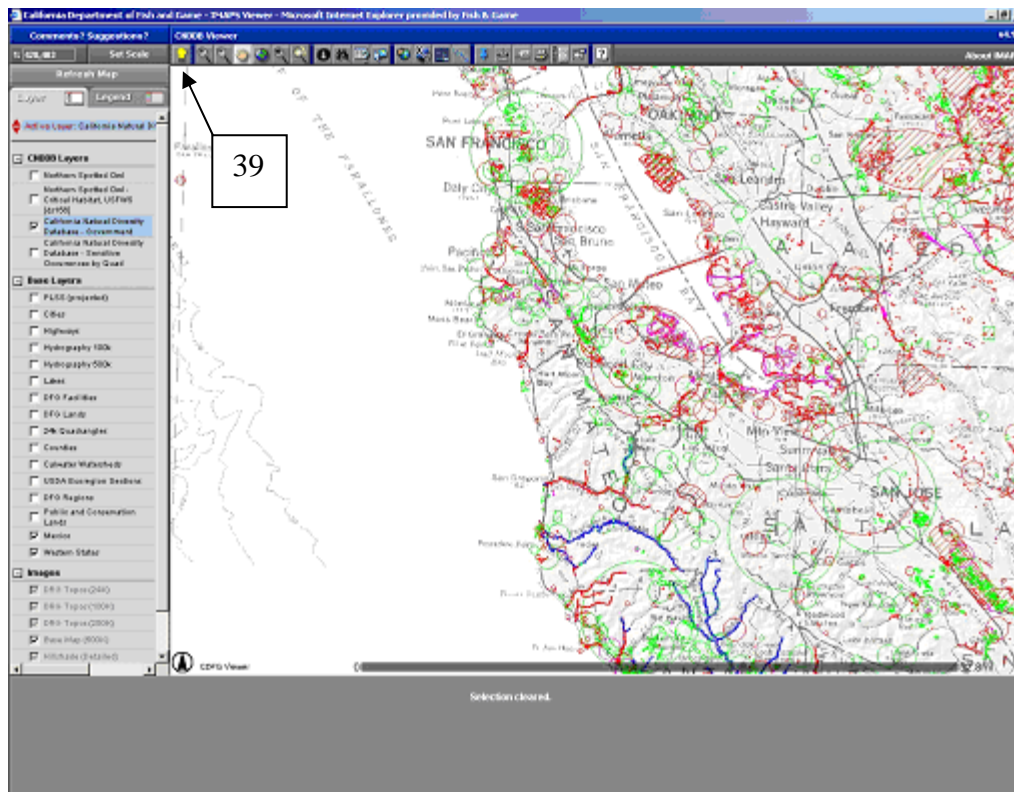


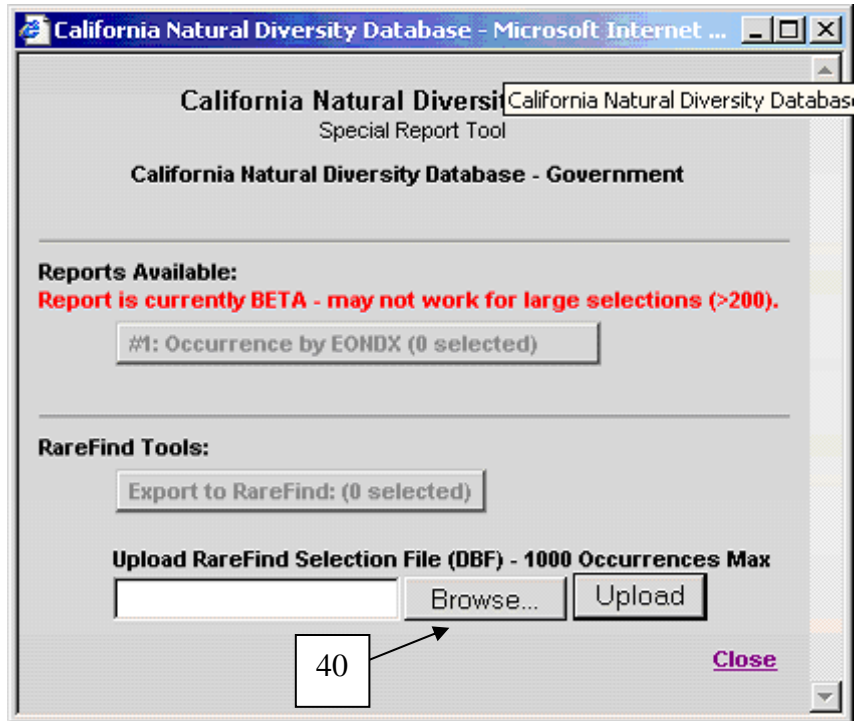
I have made a selection in RareFind for all Federal or State listed species in San Mateo County. RareFind found 30 elements and 194 occurrences (34) (Feb 2006 RareFind).

Now click on the “Export” tab (35). The default file type of “Database Table (Export to GIS)” is the option you want (36). Click on the “File...” button (37). The default path for exports from RareFind is shown in the window. The default name for the selected set is always “Export.DBF”; Rename your selection. I renamed this selection “BIOS\_tutorial.DBF”. Click “Run” (38)

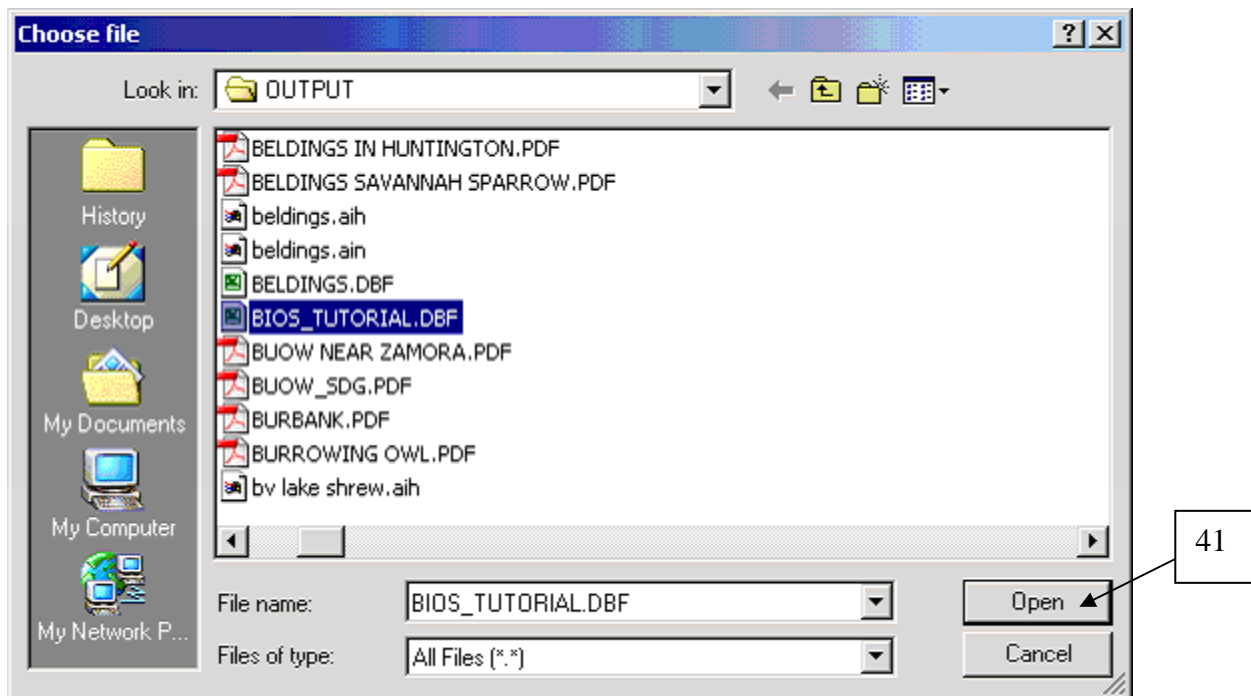


Now go to BIOS and click on the “Extended functionality” tool (light bulb) (39).

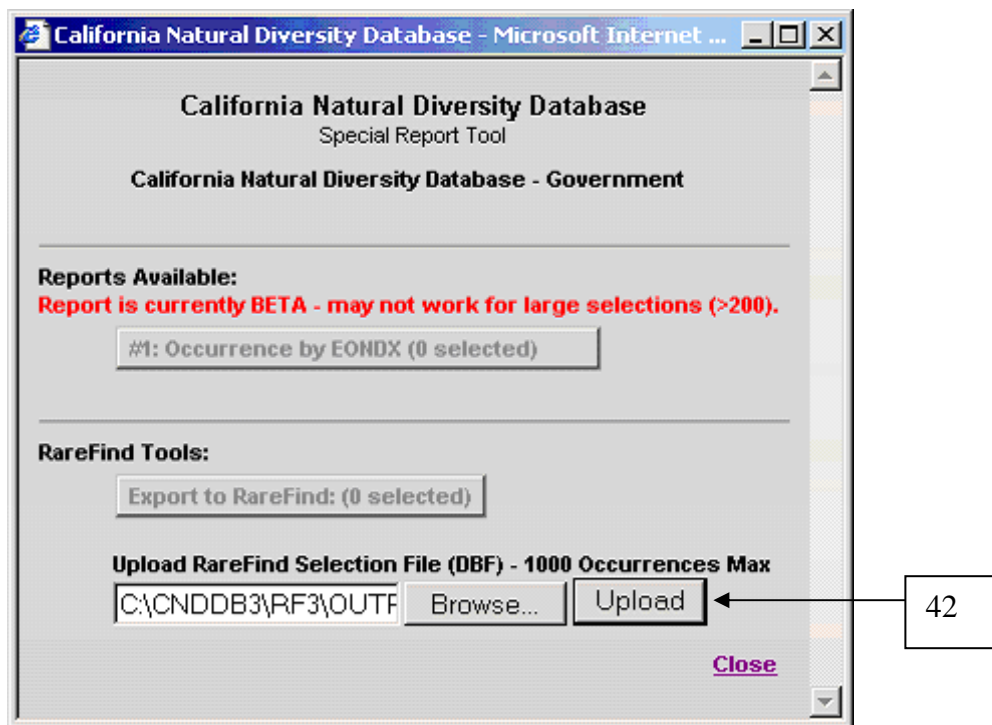




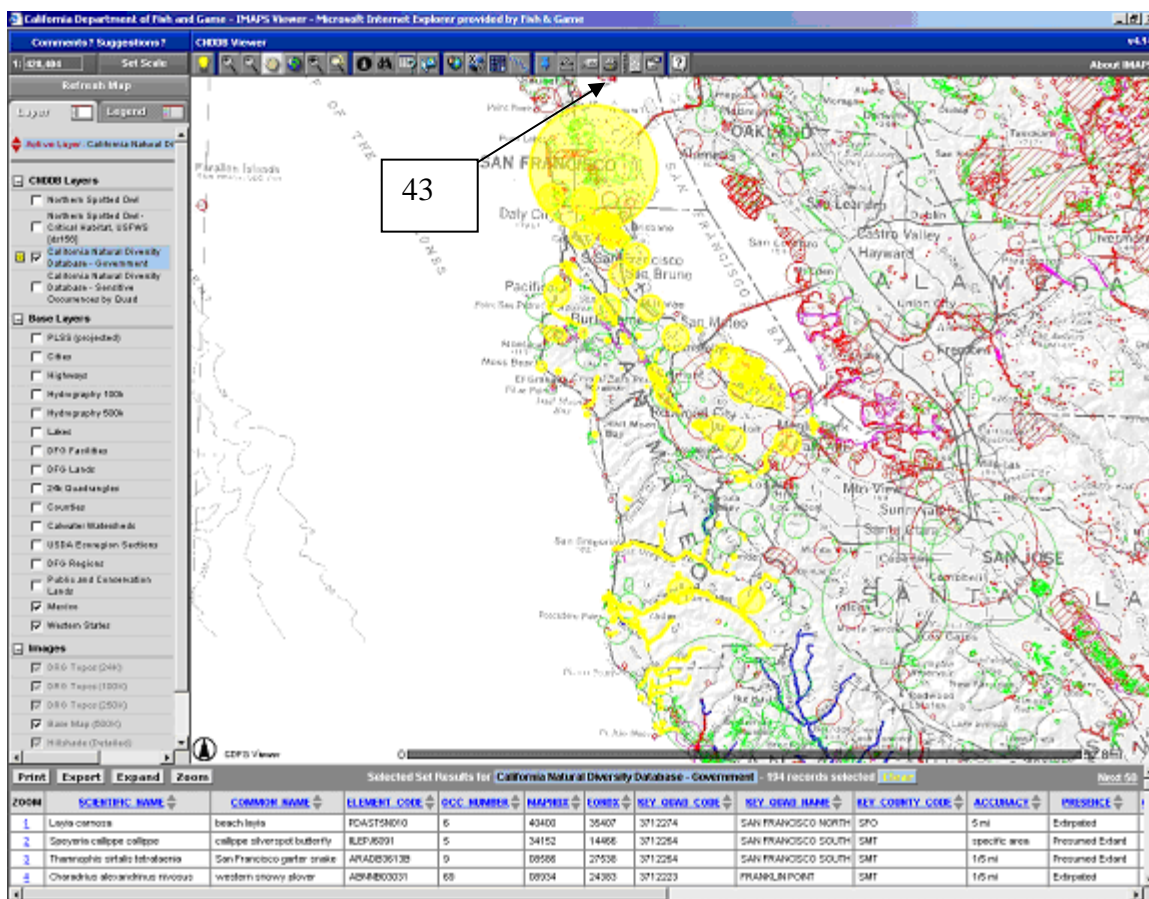
Click on "Browse" (40) and the following window opens:



Select your file and click "Open" (41). The following window will open:

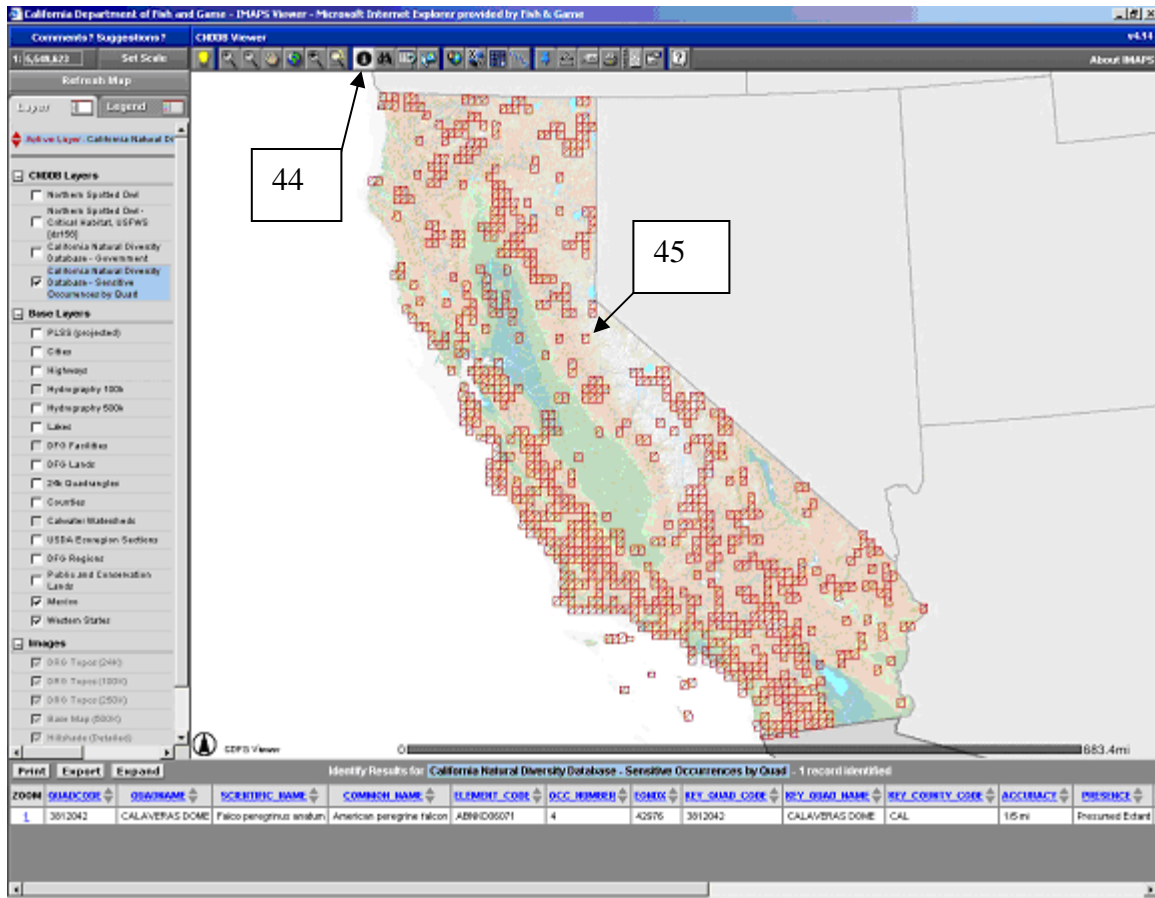


The whole path of the file you selected shows in the window. Click the “Upload” button (42).

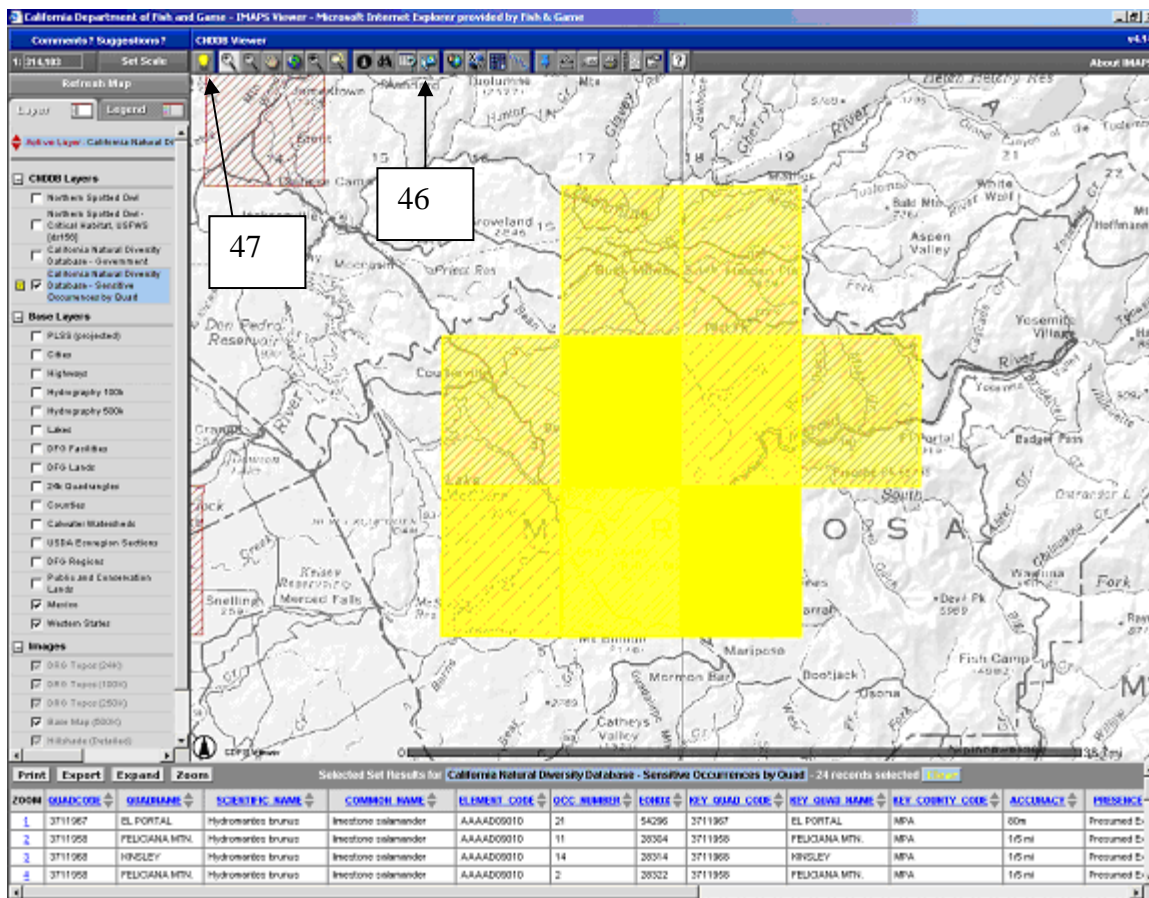


The table at the bottom of the screen gives some text information for the selected occurrences. The map zooms to the correct area and shows the selected occurrences in yellow. You can print this map by clicking on the print tool (43). You will be prompted to set the printer to “landscape”, and you will have the opportunity to give the map a title. The map can be saved, emailed, or printed.





There are two versions of RareFind. A government version with all of the information contained in the CNDDB, and a commercial version with the exact locations of some sensitive records suppressed. The fourth layer in the CNDDB / Spotted Owl Viewer (CNDDB - Sensitive Occurrences by Quad) shows all of the USGS topographic quad maps that contain suppressed records. You can use the "Identify" tool (44) to generate a list of the sensitive occurrences on that quad. In this example the quad was Calaveras Dome (45). Note: this layer must be made the Active Layer in order for the tools to work.



You can also use the “Graphically select features from the active layer” tool (46) to select one or more quads. The density of the yellow highlight is an indication of the number of sensitive occurrences on that quad. If you click on the “Extended functionality” tool (47) the following window will open:

California Natural Diversity Database - Microsoft Internet ...

California Natural Diversity Database  
Special Report Tool

California Natural Diversity Database - Sensitive Occurrences by Quad

Reports Available:  
Report is currently BETA - may not work for large selections (>200).

#1: Occurrence by EONDX

RareFind Tools:  
Export Selected Attributes to RareFind

Upload RareFind Selection File (DBF) - 1000 Occurrences Max

Browse... Upload

Close

Click on “#1: Occurrence by EONDX” to generate BIOS text reports:

Adobe Reader - [C:\DB\STELON\SCOP\1].pdf

File Edit View Document Tools Window Help

Save a Copy Search

Select

90%

Help

Report Generation Date: 02/09/2006

**CNDDB BIOS**

California Department of Fish and Game 1 OF 23

California Natural Diversity Database

Map Index: 3711250 (Tulare Mtn.) EO Index: 28122  
Keyquad: Occurrence Number: 2 Element Code: AAAAD09210

Scientific Name: *Hydromantes brunus* Common Name: Limestone salamander

Listing Status: Global: None State: Threatened Other Lists: CHPS List: REDCode: Audubon: CDFG: IUCN: Y Other: Y

CHDS Element Ranks: Federal: G1 State: S1

General Habitat: LIMESTONE OUTCROPS IN OGDEN PINE-CHAPARRAL BELT ALONG THE MERCED RIVER AND ITS TRIBUTARIES, FROM 800-2600 FEET IN ELEV.

Microhabitat: CALIF BUCKEYS AN INDICATOR OF OPTIMAL HABITAT. SEEKS COVER IN LIMESTONE CAVERNS, TALUS, ROCK FISSURES, SURFACE OBJECTS.

Last Date Observed: 2000-02-20 Last Survey Date: 2000-02-20  
Owner/Manager: Occurrence Type: Habitual/Active occurrence  
Main Info Source: GORMAN, J. 1952 (MUS) Trend: Unknown  
Presence: Presumed Extant Occ Rank: Unknown

Location: "SECRET" Location information suppressed.  
Location Detail: Please contact the California Natural Diversity Database, California Department of Fish and Game, for more information: (916) 324-3812.

Ecological: HABITAT CONSISTS OF LIMESTONE OUTCROPS ON A NE SLOPE, IN THE UPPER SONORAN LIFE ZONE, DOMINATED BY POOTHILL PINE, TOYON, CHAMISE, BUCK BRUSH, YERBA SANTA, PHACELIA SP, AND CALIFORNIA WOOD FERN.

Threats: THREATENED BY OVER-COLLECTION.

General:

Meridian: Township/Range: T/R Accuracy: Area (acres): UTM: Zone: 11N/E Latitude/Longitude: / Elevation (feet):

Source Codes:  
BPO00101  
CAS04501  
GORM4401  
M1226501

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Report Designer - fullreportor.frx - Page 3 - Press Esc to Close

California Department of Fish and Game  
Natural Diversity Database  
Full Report with Sources for Selected sensitive Elements

***Hydromantes brunus***  
limestone salamander

Element Code: AAAAD09010

Status	HDDB Element Rank	Other Lists
Federal: None	Global: G1	CDFG Status:
State: Threatened	State: S1	

**Habitat Associations**

**General:** LIMESTONE OUTCROPS IN DIGGER PINE-CHAPARRAL BELT ALONG THE MERCED RIVER AND ITS TRIBUTARIES, FROM 800-2000 FEET IN ELEV.

**Micro:** CALIF BUCKEYE AN INDICATOR OF OPTIMAL HABITAT. SEEKS COVER IN LIMESTONE CAVERNS, TALUS, ROCK FISSIONS, SURFACE OBJECTS.

\* SENSITIVE \*

Occurrence No.	2	Map Index:	14413	EO Index:	20322	Dates Last Seen
Occ Rank:	Unknown					Element: 2000-02-20
Origin:	Natural/Native occurrence					Site: 2000-02-20
Presence:	Presumed Extant					
Treat:	Unknown					
Main Source:	GORMAN, J. 1952 (MUS)					Record Last Updated: 2006-01-24

**Quad Summary:** FELICIANA MTN. (3711958436C)  
**County Summary:** MARIPOSA

\* SENSITIVE \*

Lat/Long:	37.61170° N - 119.95728° W	Township:	04S
UTM:	Zone-11 N4166848 E238965	Range:	18E
Mapping Precision:	NON-SPECIFIC	Section:	02 Qtr: SW
Symbol Type:	POINT	Meridian:	M
Radius:	1/8 mile	Elevation:	1,250 ft

**Location:** EAST SIDE OF HIGHWAY 140, ABOUT 0.6 TO 0.7 MILE NINE BRICEBURG

**Location Detail:** TYPE LOCALITY. SITE MEASURES 100 X 1200 YARDS, AT 1285-2500' ELEVATION. TYPE COLLECTED UNDER SMALL ROCK, AT BASE OF LOW CLIFFS ALONG HIGHWAY 140; PARATYPE WAS COLLECTED UNDER MOSS-COVERED ROCK ON HILLSIDE UP SLOPE FROM TYPE SPECIMEN.

**Ecological:** HABITAT CONSISTS OF LIMESTONE OUTCROPS ON A NE SLOPE, IN THE UPPER SONORAN LIFE ZONE, DOMINATED BY FOOTHILL PINE, TOYON, CHAMISE, BUCK BRUSH, VERBA SANTA, PHACELIA SP, AND CALIFORNIA WOOD FERN.

**Threat:** THREATENED BY OVER-COLLECTION.

**General:** TYPE (2/24/52), MVZ#59530. PARATYPE (2/27/52), #59539, #59529-30, 59540-57, 62405-61, 67354, 67357-8 & 67562 (1952-7). CAS#046869-70 (2/52). MVZ #103715-6 (5/8). #222304 (5/8). #178858-62 (8/2). #202305-8 (8/6). #230640-1 (2/20/2000)

**Owner/Manager:** UNKNOWN

**Sources**

BRO60U01 BRODE, JOHN. GEOGRAPHIC REFERENCE CARD CATALOG, 1930. RECORDS OF SPECIMEN LABELS COLLECTED BY BRODE, 1980-XX-XX.

CAS04501 CALIFORNIA ACADEMY OF SCIENCES. CAS HERPETOLOGY HOLDINGS (INCLUDES STANFORD UNIV COLLECTIONS) FOR HYDROMANTES BRUNUS. 2004-01-05.

GOR54A01 GORMAN, J. A NEW SPECIES OF SALAMANDER FROM CENTRAL CALIFORNIA. HERPETOLOGICA 10:153-158. 1954-XX-XX.

MVZ06501 MUSEUM OF VERTEBRATE ZOOLOGY. PRINT-OUT OF MVZ SPECIMEN RECORDS FOR HYDROMANTES BRUNUS. 2006-01-24.

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If you click on the "Export Selected Attributes to RareFind" option and you have the government version of RareFind, you will see the complete report. Note, that the report is marked "sensitive" (48).